

urethra and its associated organic structures that has appeared. The various phases of the subject are well classified and thoroughly discussed. Although stress has been laid throughout upon the importance and necessity of urethroscopy for the proper diagnosis and treatment of many cases, a just consideration of other clinical diagnostic procedures and methods of treatment has not been neglected. It may be rightly objected that the author should at least allude to the value of the high frequency electrical current (Oudin or d'Arsonval) in comparison with electrolytic and other electrotherapeutic methods for the destruction of polypi, papillomata, etc. Again it may be inquired as to the propriety of devoting so much attention to impotency and prostatic disease to the exclusion of the seminal vesicles. The illustrations, many colored urethroscopic views, are exceptionally meritorious and numerous and deserving of attention by all those interested in this subject.

B. A. T.

DEFENSIVE FERMENTS OF THE ANIMAL ORGANISM. By EMIL ABDERHALDEN, Director of the Physiological Institute of the University at Halle, a/s; English translation by J. O. GAYRONSKY and W. F. LANCHESTER of third German edition. Pp. 242; 11 text figures and 1 plate. New York: William Wood & Co., 1914.

THE great interest which has been aroused by Abderhalden's theory of protective (defensive) enzymes, its practical use in the diagnosis of pregnancy, and the many attempts to apply the theory as a means of diagnosis in diseases of various organs, makes especially welcome an English translation of this noted investigator's account of his labors in this particular field. That interest in the subject discussed is indeed great is shown by the fact that between the appearance of the first German and this translation of the third German edition a period of less than two years has elapsed.

Abderhalden's theory, briefly stated, is, that upon the introduction into the body of substances out of harmony with (foreign to) the blood-plasma, new ferments appear which are capable of transforming these substances into simpler compounds and thus of depriving them of their specific character. The experiments of Abderhalden and his associates support this theory not only in regard to proteins, but in regard also to carbohydrates and fats. Moreover, in pregnancy, Abderhalden has established a definite diagnostic procedure based on the fact that placental products, normally foreign to the blood, enter the blood-stream during the pregnant state and cause the formation of a specific ferment. Other investigators have attempted to apply the same principle to cancer, dementia precox and a large number of other diseases.

In the book before us Abderhalden sketches the development of his theory in its relation to the general principles of metabolism and gives examples of the experimental production of ferments for proteins, fats and carbohydrates. This is followed by a discussion of his biological test for pregnancy and of the possible application to various infectious and organic diseases. Much space is given to the description of the two methods—the dialysis and the optical—of demonstrating the presence of ferments and in connection therewith the author presents in detail the many possibilities of error, which are responsible, he believes, for the contradictory results frequently obtained by those who have used his methods in the study of various practical problems.

In an appendix is presented a complete list (up to November, 1913) of papers on this or related problems. R. M. P.

NUCLEIC ACIDS. THEIR CHEMICAL PROPERTIES AND PHYSIOLOGICAL CONDUCT. By WALTER JONES, PH.D., Professor of Physiological Chemistry, Johns Hopkins Medical School. Pp. 118. London, New York, Bombay, and Calcutta: Longmans, Green & Co., 1914.

HITHERTO no comprehensive treatise has presented systematically our present knowledge concerning the nature and properties of the nucleic acids and this in spite of the fact that they now constitute one of the most satisfactorily elucidated problems of physiological chemistry. This monograph sketches the historical development of the subject and then proceeds to give the present conception of the chemical structure of nucleic acids and of the course of their metabolism in the animal body. The author takes the stand that all the nucleic acids that have been studied are identical either with thymus nucleic acid or with yeast nucleic acid. He considers allantoin as probably the only physiological destruction product of uric acid and considers that human beings have no power to destroy uric acid, in which respect they differ from all the lower animals studied. The views of those who disagree with the author on these and on other points are outlined, and the experimental evidence pro and con briefly described. An excellent bibliography with about 450 references is appended and the work is carefully indexed. J. H. A.